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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/884,231	06/19/2001	Richard E. Auerbach	1039-68477	5169

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BARNES & THORNBURG
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EXAMINER

TUGBANG, ANTHONY D

ART UNIT PAPER NUMBER

3729

DATE MAILED: 05/20/2003

17

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/884,231

Applicant(s)

AUERBACH ET AL.

Examiner

A. Dexter Tugbang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21,23 and 28-33 is/are pending in the application.
- 4a) Of the above claim(s) 20,21,23,29,31 and 32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,18,19,28,30 and 33 is/are rejected.
- 7) ☒ Claim(s) 6-17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/19/03 has been entered.

Election/Restrictions

2. Claims 20, 21 and 23 continue to stand as being withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 6.
3. Newly submitted Claims 29, 31 and 32 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the features of leaving a determined length of the selected thread that is wrapped with the electrical conductor positioned adjacent to the woven cloth in a determined position so that the selected thread that is wrapped with the electrical conductor extends beyond an edge of the woven cloth with the woven cloth is molded and trimmed to a desired shape to form the woven spider (as required per Claim 29); positioning the selected thread wrapped with the electrical conductor so that the thread with the conductor is a flex locus (as required per Claim 31); and leaving a determined length of the thread that is wrapped with the electrical conductor unwoven and trimming the woven cloth to create a central opening and a desired outer circumference of the woven cloth (as required by

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Claim 32); are all features that were not originally claimed and are independent and distinct from the invention originally claimed.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, Claims 29, 31 and 32 have been withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3, 18, 28, 30 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by European Patent Publication, EP 0 479 317, referred to hereinafter as EP'317.

Regarding Claims 1 and 28, EP'317 discloses a method of making a moving coil transducer comprising: selecting a thread H of a cloth 1F from which the spider is to be woven; helically wrapping an electrical conductor 2H around the selected thread H; and weaving the wrapped thread in the cloth (shown in Fig. 9).

Regarding Claims 2 and 18, EP'317 suggests that the cloth is formed into a spider (damper assembly), which is incorporated into a moving coil transducer or loudspeaker assembly (see Fig. 6) with the electrical conductor wrapped around the thread making electrical contact by

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applying a conductive adhesive of solder to at least one of the wrapped electrical conductors and leads or terminals (see col. 6, lines 38-45).

Regarding Claim 3, the claimed "float" is read as the portions of the wrapped thread 2c exposed above or overshooting the cloth (shown in Fig. 9).

Regarding Claim 30, the weaving step of EP'317 is considered to be an "integral part" of the woven cloth that is only the selected wrapped thread with the electrical conductor (shown in Fig. 6).

Regarding Claim 33, EP'317 further teaches electrically coupling the electrical conductor to a voice coil wire (terminals) with a conductor adhesive (solder) and applying a non-conductive adhesive (molded resin) between the woven spider and coil former (loudspeaker unit not shown) to cover the conductive adhesive and join the woven spider and the coil former (see col. 3, lines 35+).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 4, 5 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP'317 in view of European Patent Publication EP 0 369 434, referred to hereinafter as EP'434.

EP'317 discloses the claimed manufacturing method as previously discussed further including applying a conductor adhesive, i.e. solder (as required per Claim 19).

EP'317 does not teach wrapping multiple threads with multiple electrical conductors, twisting the multiple wrapped threads together, and subsequently weaving the multiple wrapped threads at a single shed or course in the cloth.

EP'434 teaches a transducer manufacturing process, which includes wrapping multiple threads with multiple electrical conductors, twisting the multiple wrapped threads together, and subsequently weaving the multiple wrapped threads at a single shed or course in the cloth (shown in Figures 7A and 7B). The benefits of the above process include preventing cracks in the multiple wrapped conductors (see col. 5, lines 8-13).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the method of EP'317 by including the transducer manufacturing process of EP'434, to advantageously prevent cracks in the multiple wrapped conductors and the moving coil transducer.

Response to Arguments

8. Applicant's arguments filed 3/19/03 (Paper No. 15) have been fully considered but have not been deemed to be found as persuasive.

In regards to the merits of EP'317, the applicants' contend that EP'317 does not teach wrapping an electrical conductor around a thread.

The examiner traverses in that EP'317 shows wrapping an electrical conductor 2H around a thread H in Figure 5 and that this wrapped thread is clearly weaved into a cloth as shown in Figure 6. Thus, EP'317 fully satisfies these limitations.

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Allowable Subject Matter

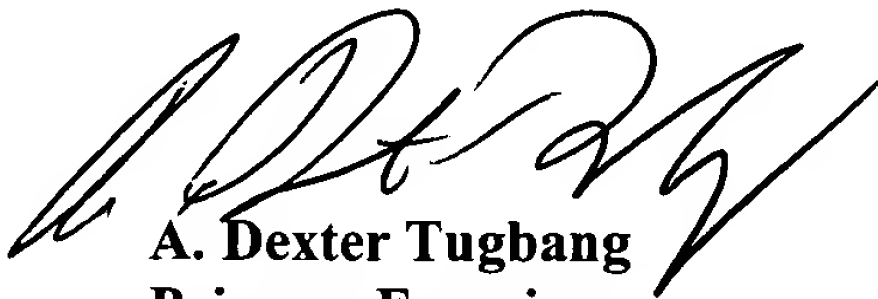
9. Claims 6-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Dexter Tugbang whose telephone number is 703-308-7599. The examiner can normally be reached on Monday - Friday 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 703-308-1789. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0858.


A. Dexter Tugbang
Primary Examiner
Art Unit 3729

May 19, 2003